

FORT HUACHUCA

2001 WATER QUALITY REPORT



Este informe contiene información muy importante sobre su agua beber. Tradúzcalo ó hable con alguien que lo entienda bien. (This report contains important information about your drinking water. Translate it, or speak with someone who understands it.)

Where Does Fort Huachuca's Drinking Water Come From?

The drinking water being delivered to you is pumped from a regional groundwater aquifer located in the Upper San Pedro River Basin. This aquifer lies beneath portions of Cochise County and Mexico. The water system is owned and managed by Fort Huachuca and consists of source, treatment, storage, and distribution facilities. All of our drinking water is treated with chlorine and fluoride to ensure the health of every consumer. Chlorine acts as a disinfectant to prevent bacterial contamination. Fluoride is added at sufficient levels as recommended by the American Dental Association (ADA) to prevent dental carries (cavities).

General Information About Drinking Water

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and it can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agricultural activities, urban stormwater runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and which may originate from gas stations, urban stormwater runoff, and septic systems.
- Radioactive contaminants, which can occur naturally or be the result of oil and gas production or mining activities.

In order to ensure that tap water is safe to drink, the EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791) or by visiting their website at www.epa.gov.

Important Health Information

We continually monitor the drinking water for contaminants. Our water is safe to drink; however, some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons, such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, and some infants or elderly persons can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA and Center for Disease Control (CDC) guidelines on some appropriate methods to lessen the risk of infection by microbial contaminants are available from the Safe Drinking Water Hotline at 800-426-4791.

Monitoring Your Drinking Water

Our water system uses only EPA-approved laboratory methods to analyze your drinking water. Our personnel take water samples from the distribution system and residents' taps; samples are then shipped to an accredited, Arizona certified laboratory, where full spectrums of water quality analyses are performed.

This Consumer Confidence Report was prepared by the Physical Science Technician of the Environmental and Natural Resources Division, Directorate of Installation Support. For additional information regarding this report or drinking water quality, please contact the Physical Science Technician at 520-538-0606 or DSN 879-0606 or send email to dis-enrd@hua.army.mil. For questions regarding the environment or natural resources on Fort Huachuca, please contact the Environmental and Natural Resources office at 520-533-3120.

WATER QUALITY

Fort Huachuca 2001 Summary of Water Quality Results

Contaminant	Last Sample Date	Unit	Goal (MCLG)	Maximum Allowed (MCL)	Detected Level	Range of Values Detected	Minimum Detection Level (MDL)	Violation (Yes/No)	Major Sources in Drinking Water
<u>Metals:</u>									
Arsenic	1999	ppb	n/a	50	2	1 - 2		No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium	1999	ppm	2	2	0.21	0.071 - 0.210		No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Cadmium	1999	ppb	5	5	0.5	ND - 0.5	0.1	No	Corrosion of galvanized pipes; Erosion of natural deposits; Discharge from metal refineries; Runoff from waste batteries and paints
Chromium	1999	ppb	100	100	2	2		No	Discharge from steel and pulp mills; Erosion of natural deposits
Copper	2001	ppm	1.3	AL = 1.3	0.27 ²	ND - 0.36	0.01	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead	2001	ppb	0	AL = 15	4.7 ³	ND - 8.9	2	No	Corrosion of household plumbing systems; Erosion of natural deposits
<u>Inorganic Chemicals:</u>									
Fluoride	1999	ppm	4	4	1.1	ND - 1.1	0.4	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate	2001	ppm	10	10	1.4	0.77 - 1.4		No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
<u>Radionuclides:</u>									
Alpha emitters	2000	pCi/l	0	15	5.3	ND - 5.3	3	No	Erosion of natural deposits
<u>Synthetic Organic Chemicals:</u>									
Di(2-ethylhexyl) adipate	2000	ppb	400	400	0.9	ND - 0.9	0.6	No	Discharge from chemical factories
Pentachlorophenol	2000	ppb	0	1	0.05	ND - 0.05	0.04	No	Discharge from wood preserving factories
<u>Volatile Organic Chemicals:</u>									
TTHMs [Total trihalomethanes]	2001	ppb	n/a	100	14.1	5.5 - 14.1		No	By-product of drinking water chlorination

Water-Quality Table Key and Footnotes

AL = Action Level

MCLG = Maximum Contaminant Level Goal

ppb = parts per billion, or micrograms per liter (ug/L)

ND = none detected

MCL = Maximum contaminant Level

ppm = parts per million, or milligrams per liter (mg/L)

1. MDL (minimum detection limit) values have been provided for contaminants that include samples with values of ND. This is the lowest level the lab can detect.
2. 90% of samples collected for copper analysis were less than the detected level shown. No samples had copper detected at a level greater than the Action Level of 1.3 ppm.
3. 90% of samples collected for lead analysis were less than the detected level shown. No samples had lead detected at a level greater than the Action Level of 15 ppb.

How to Read The Table

Our water is tested to assure that it is safe and healthy. The results of tests performed in 2001, or earlier as indicated, are presented in the table above. Only those contaminants that were detected in the water are listed in the table. Many other contaminants were tested for and not found. In 2001 Fort Huachuca's contracted laboratory analyzed 294 samples for 14 different contaminants. In addition, the Directorate of Installation Support's Operation and Maintenance (O&M) contractor monitors chlorine and fluoride levels on a regular basis. For a complete list of all contaminants regulated by the EPA, please see 40 CFR 141.153.

The column marked **GOAL** shows the Maximum Contaminant Level Goal or MCLG. This is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

The column marked **MAXIMUM ALLOWED** is the Maximum Contaminant Level or MCL. This is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available technology.

The column marked **DETECTED LEVEL** shows the results observed in our drinking water during the most recent round of required testing. **MAJOR SOURCES** provides an explanation of the typical natural or man-made origins of the contaminant.

Action Level (AL): The concentration of a contaminant, which if exceeded, triggers treatment or other requirements that a water system must follow.

We are proud to report that the water provided by the Fort Huachuca water utility meets or surpasses all Federal and State drinking water standards. There were no reportable detected contaminants during 2001. All detected levels were below the MCLs or, in the case of Copper and Lead, below the ALs.

